41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

one aspect of their presumed "familiarity with learning," if we may call it that, they gained a reputation as exorcists and curers. Today some among the couple of thousand Kaṇakkas still practise these crafts, although they no longer hold a monopoly among the Badagas. (My chief medical informant, K. Sithamma, was born in a Kaṇakka family in 1891.)

1.6. During the seventeenth to nineteenth centuries the Badaga community increased from a reported three villages in 1603 to nearly 370 villages a century ago. This expansion, marking the second phase, encompassed some developments of importance to the history of Badaga therapy. The community was faced with the problem of adapting to a new geographic and social environment, and clearly succeeded in doing so. We may presume that natural selection helped the population build up a genetic resistance to whatever montane illnesses had not previously affected the people when they were living in Mysore; and that some lowland disease organisms were no longer able to survive at the new elevation, either because it was too high and cold for their animal hosts, or else because the hosts among the scattered and tiny human population died off without transferring these organisms to new hosts, or more probably because when the density of population was very low infection by particular diseases summoned forth antibodies or other disease-resistant aptitudes, which protected their descendants from any further infection by those diseases. As the settlements expanded the increasing numbers of people permitted greater transference of disease organisms and called for greater amounts of health care; but at the same time these settlements, located in most parts of the Nilgiri Massif within a zone that lay between 4000 and 7300 feet of elevation, gave people opportunities to select the more healthy residential sites, to explore the micro-environmental differences in the area, and most importantly to discover medicinal uses for dozens of new species of plants that were in many instances confined to the Massif (see Trilingual Index). We may presume that the pharmacological uses of local plants were discovered by Badaga women who worked as goatherds and men working as cowherds, by closely observing the feeding habits of their animals. Geza Roheim has made a similar observation on the control that Australian Aboriginal women have over the medicinal use of plants which they are responsible for gathering. While it is true that Badagas did not keep

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

goats recently, they did so during the seventeenth century and even later (Finicio 1603: 723; Birch 1838:103).

1.7. After contact with the British a new adjustment with their changed environment was achieved by the Badagas, and their population was able to increase rapidly for several decades while there was still a very low density of population. One relevant factor, I would hypothesize, was that a change in their drinking habits followed the arrival of the British (from 1819 onward), and that this was associated with greater resistance to bacteria in the drinking water. The main drinks of the community at the time were fresh milk and stream water: "...at midday, or towards evening, parties of them are often to be seen seated on the bank of some brook or rill, partaking of their simple fare, which generally consists of barley or other meal, mixed up with some of the pure element that is gurgling past them, a little salt, and a little chilly" (Harkness 1832: 111; so also Young 1827: 42, Birch 1838:103, and Dulles 1835: 465-66). Two British officials, one a surgeon, make it clear that until the 1830s the Badagas had no alcohol, and "drunkenness is unknown here" (Macpherson 1820: lix; Ainslie 1834: 36). But the surgeon had already in 1829 recorded that he had "tasted very tolerable specimens of beer which had been brewed on these hills from malt of Native Manufacture" (Price 1908: 218). Within another two decades a staggering change had come about:

> Lord Tweeddale...in 1847,...stated that he had never anywhere seen such widespread and continuous drunkenness amongst low-class natives as prevailed there [the Nilgiri town of Ootacamund], not only in the case of those resident, but also in that of peons, followers, and servants, brought up from Madras and other places. The drink at this time available was...arrack, which ...was not very expensive. (Price 1908: 51)

This drunkenness was more of an urban than a rural phenomenon, although some Badagas did go to the town to indulge themselves. Meanwhile, at the same time that beer and arrack were becoming available, so were tea and coffee. These hot drinks were generally preferred by the Badagas to stream water, because of the cool climate, even though they had a religious tabu against heating milk (Vivekanandam Pillai 1937: 247). In this latter regard, I was told that if one keeps milk in a warm place it will "boil up" of its own accord

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

also contributed to a reduction in the spread of viruses, particularly as the cattle are generally kept away from these courtyards fronting the houses.

The ecological significance of these various beliefs and practices is that as the Nilgiri population increased in the nineteenth century and some village streams began to be polluted by this new pressure, the Badagas managed to avoid some contamination by switching from drinking stream water and fresh milk to tea, coffee and sometimes alcohol, all of which would be relatively free of bacterial organisms. The new balance with the environment that this change brought about was certainly one factor in the remarkable increase in the Badaga population ever since the advent of the British (Diagram 1).

At the same time that this change in drinking habits was occurring their eating habits were undergoing an equally radical transformation. In part this was due to the several dozen types of fruit, grain and vegetable introduced from Europe by British settlers and adopted by most Badagas (2.1, Table 2; Hockings 1973: 867). The variety of their diet was thus greatly improved. Also the earlier habit of eating a midday meal, often in open air (Harkness 1832: 111), tended to cease as more and more Badaga adults began working for an hourly or daily wage on the plantations and construction projects initiated by the British, and as increasing numbers of children spent the day in school. In the later nineteenth and early twentieth centuries it thus became usual for Badagas to consume only two meals a day, generally in their own homes, one at sunrise and the other in the evening. The importance of this practice from a hygienic viewpoint was that, because flies are normally active only during daytime, "eating at night or in the early morning may protect food from fly-borne contamination" (Alland 1970: 59). Any change of diet or of custom that tended to reduce the human intake of bacterial organisms was reflected in the greatly increased life expectancy during the past century and a half.

1.8. By the later nineteenth and the twentieth centuries successful exploration of the botanical realm and this steadily increasing Badaga population had, through a process of interaction and by individual experiments, observations of animal browsing, or other acts of discovery about which we can know nothing, developed the third phase in their medical history — the full-fledged therapeutic system described in this book. As an increasingly heavy work-load was

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

friends, the oldest woman of the senior generation level receiving it first, and then passing it on down the hierarchy of seniority.

Men commonly smoke *bi:dis* or other commercial cigarettes, but in the early days they too smoked dried pieces of the pepper vine.

Opium

2.8. Unlike tobacco, which grows on the Mysore Plain, the opium poppy is cultivated on the Nilgiris and has been since at least 1811. Until 1845 Badagas manufactured opium legally (Price 1908: 127, 224), and a few people have continued to do so in village gardens ever since. Poppy heads are still obtainable from the bazaars, and Todas, Kotas and Badagas often steep these in cups of coffee (Metz 1864: 132; Gover 1871: 87; Aiyappan 1948: 119). In the nineteenth century addiction seems to have been an occasional problem among Badagas (Macpherson 1820: lix; Mörike 1859: 31). Addicts felt lazy and quite fatigued. Apparently the opium was always chewed, and never smoked (Ouchterlony 1868: 26; "Geofry" 1881: 134; Francis 1908: 291). "The opium was made by scratching the green poppy-heads and collecting, after a day or two, the juice which had exuded, which had by then become gummy. This was generally done in the cold season, when the juice was supposed to be thickest." (Francis: 1908:290) It was more common in the nineteenth century to collect the poppy seed than this exudation, however; but some good quality opium was sold in the plains and even exported to China (Ouchterlony 1868: 26; Francis 1908: 290).

As we demonstrate in Chapter 6, opium was commonly used as a medicine, or as a technique of suicide, rather than as a hallucinogen. The poppy leaves were also boiled for one medicine. Therapists recognize that an addict cannot stop taking opium all at once, for "his nerves will not work and he will become mad," as I was told. Therefore the therapist gradually decreases the daily dosage of opium allowed to an addict until he is getting none.

Other hallucinogens do not seem to have been used by Badagas, even though some of them knew that the Indian willow leaf was dried, pounded and then smoked by the neighbouring Kurumbas for its hallucinogenic effect.

Hygiene

2.9. During the nineteenth century a universal complaint from

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

in the days immediately after the new or full moon. It is believed that a male birth on the night of the full moon or the next day is auspicious, but if on the day of the new moon it is more inauspicious than on any other day (Reclus 1885: 203). This belief is enshrined in the saying, "The boy born on the new moon day is bad; the girl born on the full moon day is bad." (For purposes of Badaga ritual practice, and this particular belief too, a sunset ends one day and is the beginning of the next.) A birth coming on a day between the new and the full moon is lucky; whereas one between the full and the new moon is unlucky. It is exceptionally auspicious if a *son* is born at the full moon, and luckier still if this happens to be the mother's eighth delivery (though not necessarily her eighth live birth). Under these circumstances the family will "prosper like a king's." If on the other hand it is a girl who is born at the new moon, or at her mother's eighth delivery, it is then believed that the family the child marries into will prosper, and so many will want to marry her.

The unfortunate boy born on the day of the new moon is called Tippa; and a girl born at the full moon is similarly Tippe. As soon as such an unlucky child has been born it is put into an old winnow and dragged a few inches across the floor. The name Tippa means "rubbish dump," and this act symbolizes throwing the baby away as rubbish: afterwards the inauspicious birth will not have a bad effect on the family. Later, at its naming ceremony, the child will be given two names so that it does not have to be called by this distasteful one.

4.7. Long ago in cases of very difficult labour Badaga midwives performed Caesarean operations, using the small knife that is intended for severing the umbilicus. I could not ascertain whether the wound was stitched up afterwards: in those times people did not care very much whether the mother died, provided the child was born and remained alive. Now the opposite attitude prevails. Some midwives still know how to reach into a womb and remove a dead foetus. It should be noted that if a pregnant woman dies the foetus must be cut out before disposal of the mother's corpse: from this unfortunate custom some basic surgical knowledge was undoubtedly gleaned in the past.

Nowadays if a woman is having a particularly difficult labour a special mixture is prepared for her. Items used in this include dried ginger, pepper, cumin, clove, crude sugar, coffee powder,

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

clarified butter and sweet flag. All but the last two are grown in the plains and bought in the bazaar. Sweet flag is a Nilgiri plant the rhizome of which is dried. These items have to be mixed in particular proportions. The dried ginger is a rhizome one cm. thick; a piece one cm. long is used; also the same amount of sweet flag rhizome; four small pepper seeds; one teaspoonful of the small cumin seeds; three or four cloves; 1/2 cube of sugar; 1/2 teaspoonful of coffee powder; and two teaspoonfuls of clarified butter. Except for the butter, coffee, sugar, and cumin, these items are crushed on an open mortar with a metate-like stone roller. This object, about 20 cms. across, is called *maddare* or *matkallu*, and is used exclusively by Badaga therapists for grinding up medicines. An empty pot is put on the fire, and the cumin seeds roasted in it; when ready, they make a crackling sound. Then about two tumblers of water and the crude sugar are added, and after them the other ground items. As soon as the water boils the coffee powder is added; and when the liquid has half evaporated, it is filtered carefully through a piece of clean white cloth into a tumbler containing the clarified butter. When it has cooled a little this mixture is given to the woman to drink. After that her pains stop if the delivery is not really imminent; or else she has a quick delivery.

4.8. For a week or so before the expected birth the neighbours and other women of the girl's lineage keep an eye on her. When one of them has to go off to the fields to work she first calls to enquire about the health of the expectant woman. As soon as labour starts her parents send messages to all of the neighbouring houses, and also to her husband's house. The latter is supposed to pay the messengers who bring the news to him.

There is generally more than one midwife in each village. There are usually also some girls studying midwifery, so that as the years pass the younger women can take over from the old midwives. No male is allowed to be present at a Badaga birth. Any woman can be there, and generally women who know how to deliver a baby are asked to come, as are the girls who are learning midwifery. There is no rule that small girls should be excluded but they usually are because they may become afraid. For that same reason pregnant women are generally not allowed there. Women who are breast-feeding babies are also strongly advised not to come, since the strong smell may have a bad effect on both mother and child. Despite such warnings some brave nursing mothers may still come,

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

853 the woman is startled, or if she comes into contact with a "bad wind" as we discuss below (5.4). When a nursing mother comes (262) from a family known for its low milk yield she is given butter-milk, made from boiled cow's milk, and with it a rich diet of clarified butter and food made from little millet. She does no hard work and enjoys complete rest. (Nothing is rubbed onto the breast.)

5.3. If a nursing mother is eating irregularly, or having sweet things, or too much food, such behaviour can affect the nature of her milk. To counteract its poorer quality a certain medicine can be given to the child, but only between its fifth and twelfth months (generally just in the fifth and sixth). It is made from two plants, *homogu* and false privet, used in the proportion 2:1 and baked with clarified butter. The material is then ground on a special stone and mixed at the same time with some of the mother's milk. A pinch of salt is usually added. Finally half as much butter as the volume of this mixture is added to it, and the resultant medicine is divided into three parts, each rolled into a ball 2 cms. in diameter. The baby swallows one of these balls on the morning, a second in the evening, and the third the next morning.

853 278 757

If a nursing mother eats too many sweet things, she may transmit worms to her baby through the breast-milk. In fact, small children are much more liable to worms than their mothers. A woman thus may not have worms while her nursing infant does; and if she eats too many sweets in the eighth or ninth month of pregnancy, worms may appear in her child during the first three months of life.

853 262 164

5.4. A nursing mother is regularly afraid that if she goes near a corpse or smells another birth, or if she smells anyone other than her own husband in the early morning who has not yet bathed since coitus the night before, the breasts may cease to give milk. Some are even afraid that a sudden noise will have this effect, and others are afraid of hearing talk of any terrifying subject. This phenomenon of a "bad wind" associated with the polluting aspect of coitus, birth and death works in devious ways. When a newly delivered mother is in the room before another woman's delivery occurs she can stay there and the smell at the time of birth will not affect her; yet if she enters a room where a birth has just occurred the bad odour there can affect the flow of her milk. If an adult dies in her presence her milk is not threatened by a

853 783 784

853 761

759 then dropped into gingelly oil, which boils. The material is later taken out and is powdery. About a quarter teaspoonful of this is swallowed and the child will improve.

[164] If however the stomach is extremely swollen and the legs thin, this is because of a *ka:male*. The treatment is then to burn the child's stomach with a piece of glowing iron or charcoal (cf. 7.9).

INFECTIVE HEPATITIS (*bara ka:male*)

164 Chicken-pox, a common childhood disease, is also discussed later (7.2), along with the other diseases that are believed to be inflicted by goddesses.

278 759 5.38. Rue is used as a medicine for children's fever. "Even the aroma from the leaves tied in bundles and hung inside the house is said to be effective in allaying fever" (Krishnamurthi 1953 : 144).

5.39. Fenugreek is soaked, crushed, and rolled with a little water into balls : these used to be fed to young children who were lean or suffering from "consumption."

PHTHISIS (*so:gano:*)

828 755 757 5.40. When a small child falls down and is frightened, the mother immediately picks up a piece of mud from that very place and touches it to the tip of the child's tongue. This stops the child from being afraid of falling. If a child has been otherwise frightened it must immediately be covered with a blanket and given a steam bath under it, by means of water which an adult pours onto a red-hot knife blade being held under the blanket.

FRIGHT (*anjike*)

756 755 828 5.41. Generally it is an old man who knows therapeutic spells, and these are only used to cure children who are feverish and frightened; their symptoms being that they are afraid of the dark, crying at night, having nightmares, or not eating properly. A suffering child is taken to the therapist very early in the morning, since the spells have to be said before the child eats. If the therapist lives a long way from the child, he will

6 SOME COMMON BADAGA MALADIES

"This cure has been known to work sometimes."

(Informant's comment)

Skin Diseases

BENIGN WART

164

6.1. There are at least three kinds of wart or swelling. In Baḍaga a small one is called *ne:ga:le*; a bigger one is *ga:le*; and the most dangerous kind, a swelling in unseen areas of the body is called *bippiri* (when inside limb joints) or sometimes *kaṇḍa ma:le* (goitre, only on the neck). To discover which kind of swelling she is dealing with, the therapist first makes a trial with the medicine for a small wart. A piece of the tuber of wild yam is ground up to produce a small quantity of liquid, which is dabbed on the wart. If more of the medicine is then required the whole tuber is ground to powder, which is mixed with woman's milk or, failing that, cow's milk or even water (curds or clarified butter cannot be used for this). The mixture is applied to the swelling and dried near a fire. No cloth is tied over it. This procedure is followed through once, twice or thrice, and if the swelling is small it will be cured. Alternatively the juice of *alavan giḍu* can be touched on a wart, or

757
•298

757

else *kal hamiske*, a lichen, is crushed to a paste and applied to the skin.

FURUNCLE : ABSCESS *gaːle*

6.2. If however it is a larger swelling it will grow bigger and another medicine, called *pattu*, must be used. It includes two roots, evening primrose and *nelahiːssu*. These are ground up together with a half teaspoonful of turmeric rhizome, 1/4 ounce of crude sugar, the buds of the Jamaican switch sorrel, a tablespoonful of little millet, and a pinch of salt. Water is added to this mixture to yield a paste which is applied to the swelling. A small head can then be seen on it, and the paste is not put over this point. A leaf of the cutch tree is taken, and on its upper side is put some groundnut oil (in former times, gingelly oil). This leaf is held over the fire until singed brown; and in this state it is applied to the swelling, and if possible tied in place. It has to be kept there for one day, and as the medicine is usually applied during the evening the patient has to be very careful about how he lies in bed. Pus forms in the swelling, and after a while oozes out, carrying the leaf with it. If however the swelling does not break open within a day the therapist removes the leaf to look at it. If all the sides are white and the head is red, he knows that it is "ripe"; otherwise he must repeat the preceding treatment.

When it is ripe but no pus comes out, he takes a red-hot needle and touches its point carefully on the lower side of the swelling, rather than on its head, and usually all the pus will drain out. If it does not, the swelling may become bigger. The pus continues to drain off for one or two days ; and to aid it a thread is stiffened by dipping it in turmeric paste. This is then passed through the hole that is oozing so that it will not close up. A thick coating of liquid cowdung is put all over the swelling except on the hole and the thread. As the cowdung slowly dries it causes the swelling to contract and so expels the remaining pus. For

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

(*gore huṇṇu*) To cure it they are washed clean with hot water and anointed with butter, or nowadays coconut oil, before the patient goes to bed. 757

ALOPECIA (*bo:le maṇḍe*) 6.9. A treatment for baldness is to rub deer's blood into the scalp. [755]

DERMATITIS VENENATA (*bava:ci turi*) 6.10. When women are gathering firewood they are careful to avoid contact with a creeper called *bava:ci*, which grows in the shade of the forest. If it is broken and its juice touches the skin, itches develop all over the body. The treatment is to touch the itching parts with *go:re* (the name of many species; cf. trilingual index), a plant that grows in damp places. After about a week the itching stops. [764]

ECZEMA (*hu:huṇṇu*) 6.11. Eczema is reportedly treated by grinding up the leaves of dead-nettle and applying the mixture with lime juice to the affected areas (Krishnamurthi 1953: 145). If there is prolonged itching on one part of the body, the skin is trimmed off and then medicine for a laceration is applied.

Lacerations

LACERATIONS (*gaiya*) 6.12. Something intolerable is referred to by the proverb, "It's like filling a wound in the stomach with salt." Another proverb emphasizes the need to take great care of lacerations: "Isn't the wound like an eye?" In general one should not interfere with a wound once it has been treated. First-aid for a cut, if there is no opportunity to get the necessary plants, is to burn an old rag and put the ashes on the wound. 752 [539]

6.13. A cut is not washed before treatment, even if it is on a dirty foot. It may indeed be tied up temporarily with a dirty cloth. Medicines to put on lacerations have changed over the years. Before the British reached the District in 1819 it was customary to use pink marsh balsam or red liberty cap plants. Later, when the geranium had been introduced into the Hills, its younger leaves were used instead. These are ground with salt and two or 752 278

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

752
278

three peppercorns into paste which is bandaged onto the cut. It is said to stop a swelling and infection. For some sixty years past a third species has been used; it is the hemp agrimony, and it supposedly works quicker. Leaves of any of these four species are nowadays ground up with a pinch of salt and applied thus to the wound. A bandage is then tied over it.

752

BRUISE (*kandalu*)

6.14. Badagas have no cure for blisters. If these develop on the hand a person continues to work, since his hand must toughen if he is to continue at it anyway. Similarly, no treatment is given for bruises.

(278)

THERMAL BURNS: DRY (*benda huṇṇu*)

6.15. For a burn, the therapist grinds up leaves of *kudure ko:ku* (the name of several pennywort species), then mixes them with slime from some stagnant water, and after applying this to the wound ties a clean cloth over it.

(539)

There is a proverb referring to saliva, oil or any similar first-aid that might cool the sensation of the burning: "He won't [even] put saliva on a burnt hand." It refers to someone too selfish to help another even to this minimal extent.

(783)

One type of burn is not treated at all. If a man returns to the Badaga community from jail, or from having been a Christian convert, he goes through a purification which includes burning the tip of the tongue with a piece of glowing charcoal or gold wire. He must simply allow the wound to heal.

6.16. Another treatment is to take one of the larger leaves of the castor-oil plant, heat it, and put it mixed with gingelly oil onto a wound.

(278)

THERMAL BURNS : WET (*benda huṇṇu*)

6.17. For a scald the therapist grinds some prince's feather leaves and mixes them with twice that amount of some slime from stagnant water. The mixture is then applied to the scald.

Animal Bites

(136)

6.18. As every child knows, many Nilgiri animals bite. The commonest as well as the smallest of

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

136 752 these, is the flea, "which is very numerous in the early part of the monsoon. They are put to flight by [278] [drinking] an infusion of a plant called by the natives Wassumboo [*vasambu*], (*Acorus calamus*), which is indigenous in the Hills." (Baikie 1857: 110)

6.19. Badagas recognize several types of lice and tick. "All live on the dirt of the body or clothes and are spontaneously generated from it," I was told. It is therefore a shameful matter to have these parasites, when, as one proverb puts it, "Small insects are browsing on the head of an uncaring [515] man." To prevent lice, people wash themselves daily and also shave off pubic hair (cf. 2.13). Epi- [164] demics of relapsing fever have spread from time to time through the community with the help of body lice (Madras 1928: 63).

136 752 539 6.20. It is recognized that if the bites of larger animals are not cared for properly they may prove fatal, as one proverb warns: "The person scratched by a porcupine cannot return to the] village; a person scratched by a hyena cannot [return to the] yard." Also in the same vein is this one: "The man who is torn by the ibex is not for the house-yard; the man who is torn by the pig is not for the village"; in short, he is finished. The rarest biting animal, now 136 nearly extinct in the Nilgiris, is the tiger. Only tigers that are wounded in the face or suffer from other ailments that prevent them from hunting effectively will become man-eaters (Anderson 1967: *passim*).

136 752 There have been few recent cases of tigers mauling Badagas, and there is no specific treatment for such wounds beyond the above-mentioned cures for lacerations. Such treatment is also attempted when Badagas are gored by cattle, primarily buffaloes.

6.21. In a case of dog-bite a small amount of lime is put on the wound, and a small copper coin tied on top of this. The patient should not bathe for three days; on the fourth day the bandage can be removed and the wound is cured.

None but a mad jackal would bite a man. Villagers

757

of breast milk into the eye. The pain will disappear if this treatment is carried out three times, in the morning, the evening, and the next morning.

CORNEAL SCAR OR VITAMIN A DEFICIENCY (*bella kannu*) 752 (278)

6.34. A white mark may appear on the conjunctiva if a wound caused by a stick or grit is neglected for a day or more. The therapist grinds one or two seeds of coriander into a fine powder. This is put into the corner of a fine, clean, cotton cloth and the pinched-up corner dipped into woman's milk or failing that cow's milk. The patient lies flat on his back with his eyes open. After the milk has soaked into the powder for one minute one drop is squeezed from the cloth onto the white spot. If the wound is small this will be quite enough to cure it; but if necessary, treatment can be given two or three times. No more then three drops should be needed even for a large wound: one should be applied in the morning, another in the evening, and the third the next morning. As the drop is placed on the eye a helper holds the eyelids open. If not administered properly the coriander may cause the eye to sting. After receiving a drop the patient must lie still for two or three minutes with the eye closed. He must not rub it even though tears will exude.

6.35. Another treatment for a white spot on the conjunctiva involves a bud of the hill gooseberry. The therapist holds it in her clenched fist and blows through it into the patient's *ear*.

(755)

755

6.36. In a more advanced case of whiteness on the conjunctiva, there is another treatment that involves a certain bud. This one is about 3 mm in diameter, and must be collected when it is very small, along with a few leaves, from a fairly dry area: if it is gathered in a swampy place it will have no curative effect. The identity of the species is a professional secret that a therapist will not disclose till on her deathbed. Were she to tell anyone, her treatment of this advanced form of white spot would never work again. (I was only able to determine that the plant looks something like oats.) The therapist keeps the

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

757
755

not dry himself, but instead sits covered with a cotton cloth under which some incense is burnt to create a thick smoke. After this a cure can be expected. During the entire course of the illness the patient must eat only the "cooling" foods such as milk and fruits, and must abstain from things like chili. Also he should use no woollen material for clothing or bedding.

Mouth, Nose and Throat

DENTISTRY 752
(304)

6.38. Teeth are not filed in any way nor are cavities filled. If a tooth is loose, it is pulled out with the fingers, or else an attempt is made to cure it by rubbing it with ginger. There is a proverb which warns, "The son who is spurning his father is no good; the tooth that is protruding from the lips is no good." As we have seen (5.27), a woman will try to bend a child's misshapen tooth into position with a cloth.

(539)
(856)

PYORRHOEA 164
(*ma:dua*)

6.39. The major mouth disease is quickly detected because a very strong odour is noticeable even from some feet away. Although mainly a children's disease, it can affect adults. Badagas believe that "germs" eat the teeth: the disease can rot them, and a sufferer cannot put anything in his mouth because it is so painful. The mouth therefore has to be made insensitive so that he can eat. A local anaesthetic is therefore made from galls found on oak, obtained from a tree in the plains: they are over 2 cms in diameter and are ground up with woman's milk or cow's milk to form a paste, which is then rubbed all over the mouth cavity.

(753)
752
278

The medicine for *ma:dua* is made from two fruits that can now be bought in shops. One is the unripe *anila kae* and the other nutmeg; they are ground together in equal amounts and mixed with woman's milk or cow's milk or else water. This solution is taken early in the morning, before breakfast, and again before the evening meal. If

757
278

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

the disease is quite advanced a third dose is taken before the midday meal. After swallowing the medicine the patient must rest for at least a half hour before eating.

There is a treatment to prevent *ma:dua*, in the form of ginger rhizome. It must be rubbed on the teeth for up to an hour whenever the patient has time. If he does not take care of the mouth in this way, the disease can eat into the lip to cause hare-lip. It must be treated in the early stages because if left for even a week it can become very dangerous. Should it spread from the mouth to the stomach it can kill a child, as there is no effective medicine for *ma:dua* once it has reached the stomach.

The disease also spreads very quickly from the mouth to the nose, and can eat the nose away. Although recognized to be the same disease it is then called *pi:nasi*, and is treated with an extra medicine. This is put in the nostrils and onto the exterior by a specialist who may treat the patient for several weeks. I was unable to learn about its composition.

6.40. While *ma:dua* is not very contagious, there is another disease called *be:koko* which is highly contagious, and is passed to others on the eating and drinking vessels. It develops in the opposite way from *ma:dua*, starting in the stomach and spreading to the mouth. It is characterized by itching in the mouth, and is not very dangerous. Since the illness is caused by excessive "heat" in the body, everything possible is done to cool the body. Thus the patient has to be washed with *toreko:lu* bark to cool his head; he eats "cooling" foods; and swallows the *aṇila kae* and nutmeg powdered in milk.

TONSILITIS (*tonde kaṭalu*)

6.41. To cure swollen tonsils, a medicine made of leaves of thorn-apple is administered. In extreme cases the therapist removes the tonsils with two sharpened finger-nails of the left hand (cf. 5.28).

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

and Irula women had *belle*, whereas today only a tiny minority of them do.

People with either of these diseases are generally weak and unhealthy. *Su:le* can be recognized by the watery sores, but *belle* cannot be seen because it is "inside the body" of men. A therapist can tell from a person's face whether he has either disease. The remedy is to eat opium, as often as three times daily. In earlier days Badaga youths were encouraged to have relations with a variety of women so that they would catch *su:le* early in life; for if it first attacked them when much older and weaker it could kill them. Since they deliberately tried to spread the disease in this manner, it tended to be more widespread among the Badagas than among other tribal groups.

Nowadays it is a great disgrace if a person is known to have a venereal disease and he is shunned socially. The seriousness with which it is treated is adumbrated in the proverb, "A debt is like a woman's disease (*su:le*)." In general the disease is still brought into the community by men who have had relations with non-Badaga women, such as urban prostitutes. If a man knows that he is infected he avoids infecting his wife.

It is said that a particularly virulent form of the disease can only be cured by intercourse with a donkey. If the donkey dies immediately afterwards, the man is presumed cured. In one village where I stayed a man borrowed the washerman's donkey, but was dismayed to find that it did not die.

STERILITY

6.62. Aside from venereal disease, the only other serious reproductive problem for Badaga is infertility, as we have seen (3.17). To understand this, it must be stated that they do not traditionally connect conception with the fertilization of an ovum, but see it as an effect of satisfaction in the minds of the couple. Badagas do believe men can be sterile, but so rarely that only one man would

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

sad and discouraged, return home in the full conviction that the expenses they have been put to and the pains they have taken have been of no avail. (Dubois 1906 : 594-95)

More recently it has also been reported that sterile women attended the popular festival of the goddess Ma:riamma at Ka:ramaḍai, near the eastern foot of the Nilgiris in Coimbatore District, to have intercourse with religious mendicants there in the hope of getting children. Such unpleasant procedures, resorted to by Badaga, Tamilian and Kanarese pilgrims alike, have long since ceased to occur, but childless couples still make vows at the Ka:ramaḍai festival "Miles" : (1933 267).

6.65. A liquid medicine (details unrecorded) otherwise given to newly delivered mothers (cf. 4.11) is administered to a person who cannot urinate. This condition and the associated swollen bladder, caused by excess of "heat" in the body, are relieved by the medicine.

URETHRITIS (*sege*)

Fevers

6.66. The Badagas like the English have a saying, "If you are suffering from a cold, take extra food; if suffering from a fever, take little food." There are different kinds of fever, and they can affect people of all ages, but one medicine can be taken for all kinds. The shoots and smaller leaves of the velvety patchouli and related species (*koḍaṅgu*) are ground up and the juice from them mixed with some salt. This is swallowed, and is said to be more effective than quinine. In the early nineteeth century opium was used as a prophylactic against fever (Price 1908: 224).

FEVER (*jara*)

6.67. The Kurumbas knew of a now-forgotten twig or root which, when smelled fresh, dispelled fever. The present medicine of the Badagas makes use instead of the nest of the red-headed fantail warbler

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

by Small Wind, he should find some *hulla majjige* and eat it immediately (Krishnamurthi 1953 : 145). The proper medication for Small Wind is made from the following ingredients: two or three blades of Bermuda grass; a 2 cms ball of fresh, soft cowdung; a red onion 2 cms in size ; and a handful of very small *doḍḍa hulla majjige* leaves. These are all ground together on a stone. Curds or failing that water are mixed with the resultant paste to make a liquid which the patient drinks. He then rests for the next ten to sixty minutes, during which time he should be cured. If not, then he has a disease other than Small Wind.

If instead of drinking the above medicine a man with the symptoms of Small Wind eats some food with chilies, or if he takes a bath, then the condition becomes more serious. It becomes very serious if he has sexual relations. Indeed, should he do all three of these things then the medicine for Small Wind cannot help him.

For such a serious case a different medicine, called *je:te maddu*, is prepared. One day's supply of it contains the following ingredients: one or two onions, no more than 2 cms in size; the hard dried fruit from the Indian quince tree, which is rubbed on a stone until less than a teaspoonful has been ground for use; two or three blades of Bermuda grass; some fresh cowdung; a handful of small *hulla majjige* leaves, with the flowers if possible; a dessertspoonful of cumin; less than a teaspoonful of kaolin, rubbed on a stone until powdered. There are two green plants which can be added but are not essential: a dessertspoonful of the leaves of rue and the same amount of cockspur flower leaves. These ingredients are all ground together and made into a liquid by the addition of curds. A large quantity has to be made, enough to cover the entire body. Although it is best to prepare a fresh supply each night, one supply can last for two days. The liquid is rubbed

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

all over the patient by a therapist of the same sex, and this is only done at night-time. In addition the patient must swallow at least three mouthfuls of the medicine. A bed is prepared in a hot part of the house, and the patient lies on it and is entirely covered with as many rugs and blankets as possible. After 20 to 90 minutes of this the patient, who is not even allowed to bare his head, breaks into a sweat. If the patient is not cured on the first night of this treatment (generally because he has just had sexual relations), it is continued for the next two nights or even for five consecutive nights. If he is still not cured by then the therapist knows that the illness is something other than Small Wind.

Should the patient want to go out in the morning after receiving this treatment, his face and feet are washed and water sprinkled over his body first. During the days he is being treated his diet is generally rice with onions, green leaves (*soppu*, "greens"), buttermilk, curd and some salt. Until completely cured he should have no chili.

6.72. Leprosy is called *doḍḍa no:* ("big disease") as a euphemism for its real name, *kusta ro:ga*, which Badagas would not generally utter. It is thought of as the worst punishment that can come through illness for the heavy sins of one's ancestors. Neither the Badagas nor the Kurumba specialists have a cure for leprosy, although those patients who can afford it take opium continuously to ease the pain. People avoid taking girls in marriage from a leprous family, although leprous men are allowed to mix in public because the disease is not thought to be contagious. Dead lepers are always buried in large quantities of salt, and not cremated.

Other general illnesses are dealt with elsewhere in this volume, in Chapters 5, 7 and 8.

41 Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

could not have been uttered during the prayer under the tree. If on the other hand the therapist has two patients needing this cure at the same time he can put down the first coin on a leaf, pray for one man, cut some bark for him, and then repeat the process for the second patient.

When the therapist goes to get the bark he takes along another man from the patient's hamlet. The family of the patient bear the expenses of both men. This second person comes to help, in case the therapist is attacked by a tiger, or injures himself, or gets caught by the forest guards—for this tree will be in a Government Reserve Forest. The therapist has to collect 90 plants for the medicine; but he must get the bark before the other 89 ingredients. (A botanist has noted that the bark yields an astringent gum-resin that is 75 per cent tannic acid; Gamble 1922:261). Among the items that are apparently considered necessary are Jamaican switch sorrel leaves, blue-gum leaves, rue leaves, Bermuda grass, cockspur flower, cumin, *hulla majjige*, and some cowdung. Another important thing to collect is some strips of fresh bark from the Indian willow tree. These he will go on collecting until evening, either around Burliya:r or on the way back to the hamlet. The medicine for Big Wind really consists of some 40 specific plants (the identities of which I have not discovered); but altogether 90 plants must be used in it, the remaining 50 being of any varieties available. On the first day of the treatment the therapist may not bring all 90 plants, yet he can still make the medicine with what he already has and use it. On the second day he can add more plants to the same medicine and re-use it. On the third day he must be sure to have all 90 plants in the medicine. This mixture has been boiled though, and it can only be kept for three days. If the treatment goes on for longer than that, then fresh medicine has to be mixed, using more of the bark that was originally brought

4: Hockings E-5 (1962-1977) 1980
AW50 Badaga AW50

from Burliyar.

The cure for this ailment should preferably begin on the auspicious days Friday, Sunday or Tuesday. If the need is urgent it can also start on a Monday or a Wednesday; but never a Thursday or Saturday. The curing is done every night for at least three days, and it may continue till the fifth, seventh, ninth or eleventh day from the start. Usually the cure is done twice nightly; but if the case is very serious it will be done three times a night, at about 1900 hrs., midnight, and 0500 hrs. The curing can begin right after sunset, but it is generally started later, after supper. It is done at night because the house must remain closed throughout, including all windows.

When the therapist brings all the medical materials he has collected, he hides them somewhere in the bus nearby rather than bring them straight to the patient's house. These materials must not be brought near children, not because the children are impure, but because some of the plants are probably poisonous and the Indian willow is hallucinogenic.

Before he starts in the evening the women clean the house and sprinkle liquid cowdung on the floor. If there is any meat in the house it should be taken out before the cleaning begins. As the sickness is caused by a god, the people present while it is being treated must be pure. For this reason no women are allowed to stay, except those who ceased menstruation at least 12 years before. No children under 18 are allowed to stay either, "because they may be affected by some bad smell," and contract the disease. None of the men present should smoke during the night either. One of them may be allowed to go into the bathroom and urinate or smoke, but only if his need is great.

Only when all the women and children have left for the night does the therapist go and bring the hidden plants into the house. The door is then shut behind him, and must not be opened again